

HCR Benchmarking Program

August 24, 2022

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Steven Winter Associates

Since 1972, Steven Winter Associates, Inc. has been providing research, consulting, and advisory services to improve the built environment for private and public sector clients.

Our services include:

- Energy Conservation and Management
- Sustainability Consulting
- Green Building Certification
- Accessibility Consulting

We have over 125 staff across four office locations: New York, NY | Washington, DC | Norwalk, CT | Boston, MA

For more information, visit www.swinter.com





Benchmarking Goals



The benchmarking program enables properties to:

- Understand and quantify their energy usage
- Confirm high energy usage properties
- Connect to resources and funding to for system upgrades

Measure Analyze Act

Measure: Whole building data



- Track whole building energy use (common areas + units)
- Work with your benchmarking provider to confirm whole building data is reported
- Contact your local utility to receive whole building data if not currently tracked
- Report whole building data via ENERGY STAR Portfolio Manager

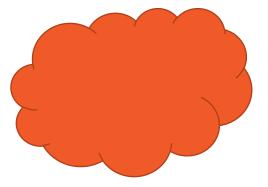
Starting with the data



- Monthly utility bills →calculate greenhouse gas emissions
- Identify high energy usage and high greenhouse gas emitting properties
 → higher costs
- Savings potential!







Greenhouse Gas Emissions



NY State Vision and Goals



 Part of New York State's policy vision is to enable and preserve homes that are affordable, comfortable, and healthy

Affordable

Efficient equipment to save New Yorkers energy and money

Comfortable

Improved building systems and operations with better controls

Healthy

 Improved indoor air quality; reduce or eliminate burning of fossil fuel on site

New York's Nation-Leading Climate Targets

85% Reduction in GHG Emissions by 2050

100% Carbon-free Electricity by 2040

70% Renewable Energy by 2030

9,000 MW of Offshore Wind by 2035

3,000 MW of Energy Storage by 2030

6,000 MW of Solar by 2025

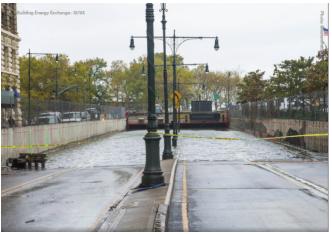
22 Million Tons of Carbon Reduction through Energy Efficiency and Electrification



Why greenhouse gases? Climate alarm.





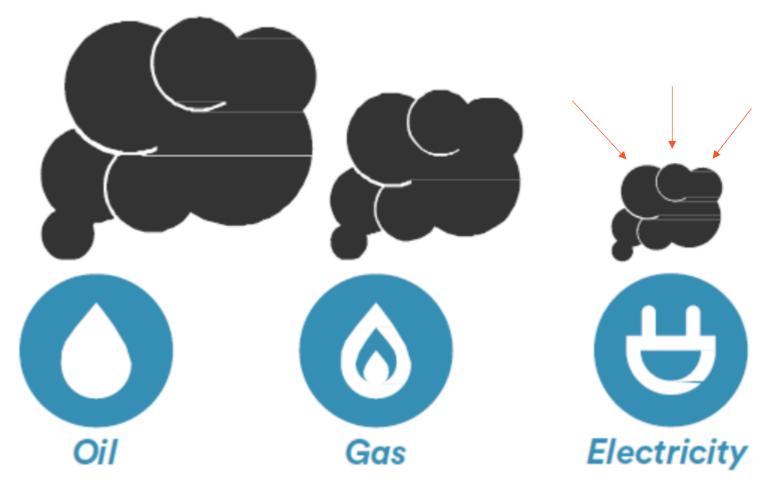






Emissions are not equal





Why are we doing this?





Mhys



Affordable

Efficient equipment to save New Yorkers energy and money

Comfortable

Improved building systems and operations with better controls

Healthy

Improved indoor air quality; reduce or eliminate burning of fossil fuel on site





2022 Program Findings

Why we measure: monitor progress



Most improved properties

H066 Sunnyside Manor

H129 The Antioch Citadel of Hope

• 19980460-00955 Springbrook Apartments

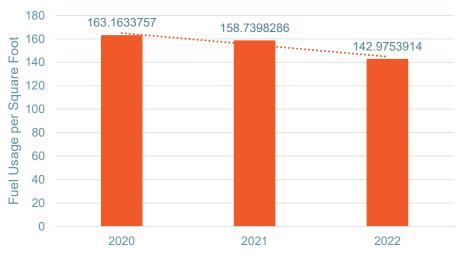


Why we measure: give feedback



 To guide properties effectively we need to understand what types of fuel are used on site and how much











Mayfield Apartments 22 Mayfield Drive HCR ID: 2585

HCR Energy Performance Memo

NY enacted the Climate Leadership and Community Protection Act, which requires NY to reduce greenhouse gas emissions 40% by 2030 and 85% by 2050. By benchmarking your property's energy performance, you are taking the first step in understanding the climate impact of your building and can begin to make informed decisions when making future updates.

This memo summarizes the 2021 energy usage provided to HCR as part of the annual benchmarking program.

How am I doing?





ENERGY STAR Scores range from 1-100. Higher scores indicates better performance. Buildings with ENERGY STAR Scores of 75 or above are considered top performers.

Your 2021 rating of a 91 means that your property is eligible for ENERGY STAR certification. Visit the ENERGY STAR website for more information on how to apply for certification.

ENERGY STAR website

Property comparison using your Greenhouse Gas Emissions

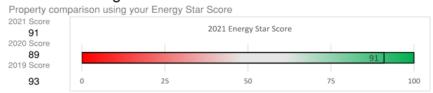


For New York State to meets its climate goals, statewide emissions must be reduced 40% by 2030. A 40% reduction in GHG from the average property's emissions is represented as the target.

For all properties that submitted data on time.



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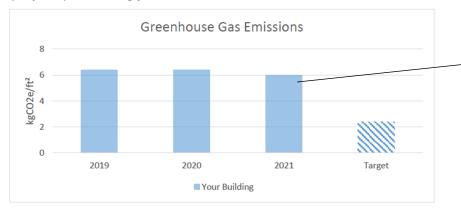
ENERGY STAR Score

There are many energy metrics. The simplest place to start is the ENERGY STAR Score. ENERGY STAR Scores range from 1-100. Higher scores indicates better performance. Buildings with ENERGY STAR Scores of 75 or above are considered top performers.

The ENERGY STAR Score considers multiple factors such as climate, occupant density, and how the building is operated. It's a way to compare the energy performance a building to others of a similar type.

Only buildings that submit **whole building data** -- including resident usage -- are
eligible to receive an ENERGY STAR Score.

Property comparison using your Greenhouse Gas Emissions



Annual Greenhouse Gas Emissions intensities were included in the report.

Property comparison using your Greenhouse Gas Emissions



Year over year GHG intensities are compared to the national median established by ENERGY STAR.

If building was flagged for low usage, the median GHG emissions for the building were included.

Submitted energy usage does not pass the data quality checks. The hashed bars on graph above indicate our projection for your building's GHG intensity. For New York State to meets its climate goals, statewide emissions must be reduced 40% by 2030. A 40% reduction in GHG from the average property's emissions is represented as the target.



What should I do next?

Benchmarking should be used as a tool to help you understand how your building performs compared to an average building and your own building overtime. It can also help you plan for future capital improvements to your building, which will likely require additional investigation into specific circumstances -- like age of equipment and eligibility for incentive programs -- to understand where to focus resources and planning efforts.

Confirm data quality

It is essential to ensure data submitted during annual benchmarking reporting is correct in order to accurately assess building performance and energy use.

The data you submitted for 2021 DID NOT PASS the data quality checks. Please work with your benchmarking provider to obtain accurate whole building data including residential units for filing year 2023.

Capital Planning

The most cost-effective approach to deep energy reductions is to coordinate upgrades with the end-of-life replacements of major building systems and natural capital investment triggers in a building's life cycle, like refinancing.

Address Data Quality

If energy metrics are very low or very high, we recommend reaching out to service provider or utility to confirm data is accurate.

Navigating Incentive Programs



- NYSERDA will provide a list of available rebate and incentive programs.
- Some low-cost or free programs are available specifically for affordable properties.
- State and utility programs are updated constantly it's important to check their websites regularly for new information.



Decarbonization Programs for Affordable Housing



Agenda

- > Climate Act & 2 Million Climate Friendly Homes
- > Capital Planning & Technical Assistance
 - Flextech
 - Low Carbon Capital Planning Support
 - IPNA

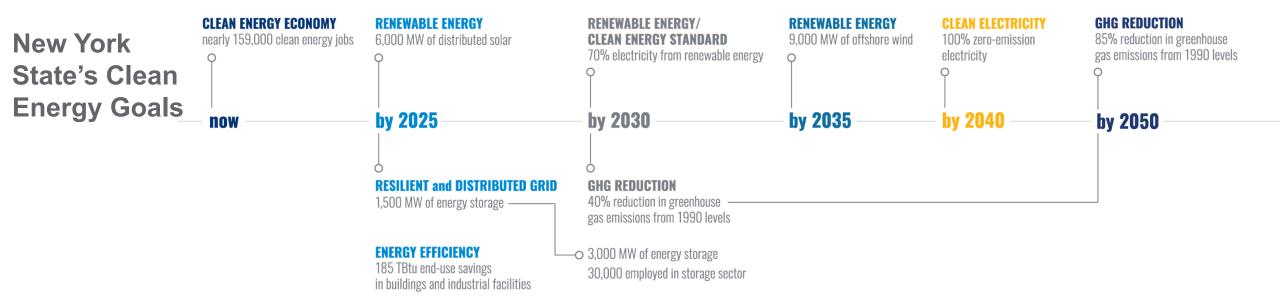
> Implementation

- Affordable Multifamily Efficiency Program (AMEEP) -- offered by NYS utilities
- NYS Clean Heat -- offered by NYS utilities
- Low Carbon Pathways
- Solar Opportunities

> Capital Planning & Implementation

- RetrofitNY
- HCR Clean Energy Initiative

Climate Leadership and Community Protection Act (Climate Act) - Overview



- Most aggressive greenhouse gas reduction goals of any major economy: 40% by 2030, 85% by 2050
- > 70% renewable energy by 2030, 100% zero-emission electricity by 2040

- > Codifies clean energy targets
- > Commitments to environmental justice, disadvantaged communities, and just transition

2 Million Homes Overview

- > Governor Hochul announced at State of the State a goal to achieve 2 million climate friendly homes by 2030
 - Goal commits New York State to 1 million efficient and electrified homes and 1 million electrification-ready homes with efficient envelope
 - Goal includes new construction, existing buildings, market rate
 & affordable housing, single family and multifamily housing

NYSERDA Program Eligibility Requirements

- Existing buildings
- Pay into electric System Benefits Charge or Clean Energy Fund
- Buildings must have 5 or more dwelling units
- At least 50% of the gross heated square footage is residential space



Capital Planning & Technical Assistance: FlexTech

- > **50% cost share** for technical assistance
- > Use a FlexTech Consultant OR Independent Service Provider
- > Funding available through <u>2025</u> on first-come, first-served basis
- > Open to existing affordable multifamily housing
- Technical Assistance can be combined with AMEEP
- > Learn More:
 - Visit <u>FlexTech funding opportunity page</u>
 - Questions and submit completed application to <u>FlexTech@nyserda.ny.gov</u>

Primary Services

Level 1+ Energy Study

Targeted / Comprehensive Energy Study

Targeted / Comprehensive RCx Study

Climate Action Plan / Sustainability Plan

Climate Heating & Cooling Study

Energy Master Planning

Energy Advisor Services

Energy Storage

Supporting Services

Investigation of renewable energy technologies

Greenhouse gas emissions inventory

Installation of permanent meters or sub-meters

Capital Planning & Technical Assistance: Low Carbon Capital Planning Support

- > **75% cost share** for energy studies focused on electrification or electrification-readiness building improvements
- > Identify potential benefits linked to recommended improvements
 - Ways to reduce utility & operating costs
 - Compliance with low carbon building regulations & avoid fines (e.g., LL97)
- > Services: Portfolio-level Studies & Building-specific Studies
- > Must work with FlexTech Consultant or Multifamily Building Solutions Provider
- > Open to both affordable & market-rate buildings
- > Learn More:
 - Visit <u>Low Carbon Capital Planning Support</u>
 - Questions and submit completed application to <u>FlexTech@nyserda.ny.gov</u>

Capital Planning & Technical Assistance: Integrated Physical Needs Assessment

- > The Integrated Physical Needs Assessment (IPNA) merges traditional PNAs, energy audits, solar screening, and screening of housing-based health issues.
- > A **standardized process** for evaluation of energy efficiency, water conservation, and health-related improvements as part of capital planning process.
- > Utilize **pre-qualified Providers** that work across HCR, HPD and HDC to complete assessment.
- > IPNA is **required** for participation in multifamily affordable housing financing programs.
- Helps agencies understand which items need repair immediately or are nearing their end-oflife to ensure that they are included in project scopes.
- Promotes an integrated approach that takes advantage of **synergies** between physical, environmental and health benefits.
- IPNA **streamlines** access to more preservation **funding** and assistance from energy program implementers (e.g., NYSERDA, utilities).
- > Learn More: NYSERDA's IPNA Landing Page: nyserda.ny.gov/IPNA

Implementation: Affordable Multifamily Efficiency Program (AMEEP)

- > Statewide affordable multifamily efficiency program, administered by NYS utilities, that provides incentives for prescriptive or custom measures, direct install, and/or comprehensive projects.
- > Incentive Structure
 - Prescriptive/Non-comprehensive: Projects will receive incentives on a measure-specific basis. Incentives are determined by a fixed rate per measure or \$/energy savings.
 - Comprehensive: Must meet 100 point minimum.
 - Multiple measures can be combined to meet this requirement.
 - Incentives are \$/dwelling unit basis.
 - Incentives differ between upstate and downstate.

t.	Comprehensive Pathway Incentive			
	Tier	Minimum Points	Downstate Incentive (\$/Dwelling Unit)	Upstate Incentive (\$/Dwelling Unit)
	1	100	\$1,500	\$900
	2	150	\$2,000	\$1,200

> Eligibility:

- Existing affordable multifamily building. Must be utility customer with gas and/or electric from Central Hudson, Con Edison, National Fuel Gas, National Grid, NYSEG RG&E, or Orange and Rockland.
- > Learn More: Complete <u>Lead Intake Form</u> to connect with Implementation Contractor. Visit <u>AMEEP</u> website for more details.

Implementation: New York State Clean Heat

- > The <u>2020 NENY Order</u> set Program budgets and targets
- > The Joint Management Committee ("JMC"), consisting of the NYS Electric Utilities and NYSERDA, oversee the Clean Heat Program
 - The NYS Electric Utilities implement the incentives program
 - NYSERDA implements the market enablement programs
- > Funding is available for both affordable and market-rate housing and various electric heat pump technologies (ASHP, GSHP, HPWH, etc.)
- > The JMC <u>publishes</u> program guidance and hosts recurring industry webinars for market awareness
- > Learn More: Visit the website















Implementation: Low Carbon Pathways

- > Install one or up to four packages of recommended measures corresponding to major building systems
 - Envelope
 - Ventilation
 - Heating/cooling electrification
 - DHW full or partial electrification
- > Packages designed to be modular can implement one at a time
- > Must work with FlexTech Consultant or Multifamily Building Solutions Provider
- > Incentives
 - Depend on package and order packages installed but range from \$700 \$5,000 per dwelling unit
- > Participant Eligibility: Targeting for replication
 - Portfolio owners/managers with 10+ buildings OR
 - Owners who are active members in real estate associations (e.g. REBNY, CNYC, UHAB, RSA, etc.)
- > Learn More: Visit website or reach out to MFLowCarbonPathways@nyserda.ny.gov

Implementation: NY-Sun Solar Incentive Program

Incentives in the Con Edison Region

- > Nonresidential (includes multifamily):
 - Small (<200kW): \$1.20/W
 - Medium (200kW-1MW): \$1.00/W
 - Large (>1MW): \$0.50/W

Incentives in the Upstate Region

> Nonresidential (includes multifamily): \$0.35/W up to 750kW

Considerations:

- > Installation of new grid-connected solar PV systems
- > Incentives levels decline as more projects enter program
- > Accepted through December 31, 2030

Implementation: Solar Multifamily Affordable Housing Incentive

Eligibility

- > Regulated affordable housing (including in the Long Island Region)
- > Only projects physically located on regulated affordable housing are eligible
 - Projects with offsite subscribers must meet additional criteria

Funding Details

- > Upstate and Long Island: \$1.00/W when combined with Nonresidential incentive
- > Con Edison:
 - Onsite: \$1.60/W when combined with Nonresidential incentive
 - Community Solar: \$2.00/W when combined with Nonresidential Incentive
 - Community solar projects that have secured the Community Credit will receive \$1.00/W
- > Capped at first 200kW of project
- > All capacity above 200kW will receive the applicable Nonresidential incentive

How to Apply

> NY-Sun Contractor submits as part of NY-Sun Incentive Program

Affordable Solar and Storage Pre-Development and Technical Assistance

- > PON 3414: Affordable Solar and Storage Predevelopment and Technical Assistance (Predevelopment Program)
- > Provides grants up to \$200,000 for the early-stage development of solar and/or storage installations on affordable housing or community solar installations that will offer benefits to LMI households
- > Applications accepted: June 30, 2020 December 31, 2030

We need you!

Role of building owner/ manager



- Verify compliance
 - Get ready for next year: May 1, 2023
- Review benchmarking memo
 - Are any of your properties noted as high energy users?
 - Connect with NYSERDA
- Capital planning
 - Are any properties planning for refinancing or capital work?
 - Review new <u>HCR sustainability guidelines for existing buildings</u>
 - Ensure energy/GHG reduction measures are part of the plan
 - Connect with NYSERDA

What steps can you take to help lower your building's GHG emissions?

